Index of Authors

AWACHIE, J. B. E. On the development and life history of *Metechinorhynchus truttae* (Schrank, 1788) Petrochenko, 1956 (*Acanthocephala*), 3P

BAKER, J. R. Three new species of *Myxosoma* (Protozoa: Myxosporidia) from East African freshwater fish. (With 1 Figure in the Text), 285

BAKER, J. R., CHITTY, DENNIS and PHIPPS, ELLEN. Blood parasites of wild voles, *Microtus agrestis*, in England. (With 1 Figure in the Text), 297

BALL, S. J. *See* WARREN, E. W.

BECKER, D. A. *See* WOTTON, R. M.

BEESLEY, W. N. *Cheyletiella parasitivorax* (Acarina: Trombidoidea) as a parasitic mite in Britain, 651

BISHOP, A. Some recent developments in the problem of drug resistance in malaria, 10P

BRAMBELL, M. R. Effects of the age of infestation and of the immunity of the host on the distribution of *Nippostrongylus brasiliensis* in the small intestine of rats, 7P

BURT, D. R. R., DENNY, M. and THOMASSON, P. A. On *Ditrypanocystis cirratuli* gen.nov., sp.nov., a gregarine possessing undulating membranes, 12P

CANNING, E. U. and ELKAN, E. Microsporidiosis in *Bufo bufo*, 11P

CHITTY, D. *See* BAKER, J. R.

CHUBB, J. C. Seasonal occurrence and maturation of *Triaenophorus nodulosus* (Pallas, 1781) (Cestoda: Pseudophyllidea) in the Pike *Esox lucius* L. of Llyn Tegid. (With 5 Figures in the Text), 419

CHUBB, J. C. Preliminary observations of the occurrence of *Echinorhynchus clavula* (Acanthocephala) in the fish of Llyn Tegid, 2P

COX, F. E. G. and VICKERMAN, K. Observations on pigment formation in malarial parasites, 9P

CROMPTON, D. W. T. Morphological and histological observations on *Polymorphus minutus* (Goeze, 1782), with special reference to the body wall. (With 19 Figures in the Text), 663

CROMPTON, D. W. T. and LEE, D. L. Structural and metabolic components of the acanthocephalan body wall, 3P

DAVIES, S. F. M. and JOYNER, L. P. The effects of dietary vitamin K on the severity of coccidial infections in the fowl, 11P

DAWES, BEN. The migration of juvenile forms of *Fasciola hepatica* L. through the wall of the intestines in the mouse, with some observations on food and feeding. (With 6 Plates), 109

DAWES, BEN. Hyperplasia of the bile duct in fascioliasis and its relation to the problem of nutrition in the liver-fluke, *Fasciola hepatica* L. (With 4 Plates), 123

DAWES, BEN. Some observations of *Fasciola hepatica* L. during feeding operations in the hepatic parenchyma of the mouse, with notes on the nature of liver damage in this host. (With 2 Plates), 135

DENNY, M. *See* BURT, D. R. R.

DESAI, R. N. *See* UTTANGI, J. C.

EDWARDS, C. M. *See* OLLERENSHAW, C. B.

ELKAN, E. *See* CANNING, E. U.

EUZET, L. *See* LLEWELLYN, J.

FELDMAN-MUHSAM, B. and HAVIVI, Y. On *Adlerocystis* gen.nov. (*Phycomycetes*) a symbiote of *Ornithodoros* ticks. (With 1 Plate and 5 Figures in the Text), 183

GRENSTED, L. W. *See* SMITH, K. G. V.

GUPTA, V. P. and PANDE, B. P. On a trematode of the genus *Echinochasmus* Dietz, 1909, with remarks on the species occurring in Indian carnivores. (With 11 Figures in the Text), 169

HAVIVI, Y. *See* FELDMAN-MUHSAM, B.

JACKSON, DOROTHY J. Diapause in *Caraphractus cinctus* Walker (Hymenoptera: Mymaridae), a parasitoid of the eggs of Dytiscidae (Coleoptera). (With 5 Figures in the Text), 225
JORDAN, A. M. The structure and possible function of the signum of *Glossina tabaniformis* Westwood. (With 1 Plate and 1 Figure in the Text), 145
JOYNER, L. P. *See* DAVIES, S. F. M.

KEARN, G. C. The life cycle of the monogenean *Entobdella soleae*, a skin parasite of the common sole. (With 4 Figures in the Text), 253
KEARN, G. C. The egg, oncomiracidium and larval development of *Entobdella soleae*, a monogenean skin parasite of the common sole. (With 9 Figures in the Text), 435
KEARN, G. C. The oncomiracidium of *Capsala martinieri*, a monogenean parasite of the sun fish (*Mola mola*). (With 1 Figure in the Text), 449
KEARN, G. C. Feeding and the nature of the food of *Entobdella soleae*, a skin parasite of the common sole, 14P
KEELING, J. E. D. Some observations on the effect of certain cytotoxic agents on nematode larvae, 6P

LEE, D. L. *See* CROMPTON, D. W. T.
LEE, D. L., ROTHMAN, A. H. and SENTURIA, J. B. Esterases in *Hymenolepis* and *Hydatigera* and the effect of eserine on the uptake of glucose, 5P
LLEWELLYN, J. and EUZET, L. The production of spermatophores in *Entobdella diadema*, 14P
LONG, P. L. and ROSE, M. E. Some recent work on immunity to *Eimeria* infections in fowls, 10P

MICHEL, J. F. The phenomena of host resistance and the course of infection of *Ostertagia ostertagi* in calves. (With 11 Figures in the Text), 63
MICHEL, J. F. and SINCLAIR, I. J. B. Host resistance to *Dictyocaulus filaria* infection, 7P
MILLER, T. A. Immunological studies in canine Ancylostomiasis, 8P
MONNÉ, L. On cyclical alterations in the Feulgen staining of nuclei during the development of nematodes. (With 2 Plates), 273
MULLIGAN, W. *See* URQUHART, G. M.
MURHAR, B. M. *Crescentovitus biloculus* gen.nov., sp.nov., a fish cestode (Caryophyllaeidae) from Nagpur, India. (With 8 Figures in the Text), 413

NATH, DHARMENDRA and PANDE, B. P. On a monostome parasite of Indian domestic fowl with remarks on the genus *Notocotylus* Diesing, 1839. (With 2 Figures in the Text), 45
NEILSON, J. T. M. *See* URQUHART, G. M.

OLISA, EMEKA G. The fine structure of reproducing *Toxoplasma gondii*. (With 2 Plates), 643
OLISA, E. G. Cytochemical and electron microscopic studies of *Toxoplasma gondii*, 13P
OLLERENSHAW, C. B. and EDWARDS, C. M. Liver fluke forecasts for Wales 1958–62, 4P
OWEN, I. L. The attachment of the monogenean *Diplozoon paradoxum* to the gills of *Rutilus rutilus* L. I. Micro-habitat and adhesive attitude. (With 1 Figure in the Text), 455
OWEN, I. L. The attachment of the monogenean *Diplozoon paradoxum* to the gills of *Rutilus rutilus* L. II. Structure and mechanism of the adhesive apparatus. (With 4 Figures in the Text), 463

PANDE, B. P. *See* GUPTA, V. P.
PANDE, B. P. *See* NATH, D.
PELLERDY, L. Coccidiosis in poultry in Hungary, 11P
PERAZA, LUCILA ARCAY DE. Studies on two new coccidia from the Venezuelan lizard *Cnemidophorus lemniscatus lemniscatus: Hoarella garnhami* gen.nov., sp.nov. and *Eimeria flaviviridis americana* subsp.nov. (With 1 Plate and 2 Figures in the Text), 95

PHIPPS, E. *See* BAKER, J. R.

PREMVATI. Effect of temperature on the development of free-living adults of *Strongyloides papillosus* (Wedl, 1856). (With 2 Figures in the Text), 483

RAO, K. HANUMANTHA. The structure of Mehlis's gland complex and histochemistry of *Artyfechinostomum mehrai* (Faruqui) (Trematoda: Echinostomatidae) from a girl at Andhra Pradesh, India. (With 1 Figure in the Text), 1

REES, B. Studies on monocystid gregarines. Six *Apolocystis* species including four new species *A. lavernensis*, *A. perfida*, *A. rotaria* and *A. spinosa*. (With 4 Figures in the Text), 491

REES, GWENDOLINE. A contribution to the morphology and life history of *Proteocephalus niloticus* (Beddard, 1913) from *Varanus niloticus* (L.) in Ghana. (With 1 Plate and 14 Figures in the Text), 201

ROBERTS, F. H. S. *Amblyomma calabyi* sp.nov. from Western Australia (Acarina: Ixodidae). (With 18 Figures in the Text), 177

ROSE, J. H. Observations on the free-living stages of the stomach worm *Haemonchus contortus*. (With 6 Figures in the Text), 469

ROSE, M. E. *See* LONG, P. L.

ROTHMAN, A. H. *See* LEE, D. L.

RYLEY, J. F. and STACEY, G. J. Experimental approaches to the chemotherapy of Trichomoniasis. (With 1 Figure in the Text), 303

SALT, GEORGE. The defence reactions of insects to metazoan parasites. (With 26 Figures in the Text), 527

SCHMIDT, GERALD D. *Hymenolepis calumnacantha* sp.nov. from Wilson's Snipe, *Capella gallinago delicata* (Ord.) in Colorado. (With 3 Figures in the Text), 409

SCOTT, J. S. On the scolex of *Paricterotaenia paradoxa*, 9P

SENTURIA, J. B. *See* LEE, D. L.

SINCLAIR, I. J. B. *See* MICHEL, J. F.

SLOAN, J. E. N. Trends in the incidence of some helminth parasites, 4P

SMITH, KENNETH G. V. and GRENSTED, L. W. The larva of *Psychoda* (*Philosepedon*) *humeralis* Meigen (Diptera, Psychodidae). (With 4 Figures in the Text), 155

SOGANDARES-BERNAL, F. *See* WOTTON, R. M.

SPRENT, J. F. A. The life history and development of *Amplicaecum robertsi*, an ascaridoid nematode of the carpet python (*Morelia spilotes variegatus*). I. Morphology and functional significance of larval stages. (With 3 plates and 39 Figures in the Text), 7

SPRENT, J. F. A. The life history and development of *Amplicaecum robertsi*, an ascaridoid nematode of the carpet python (*Morelia spilotes variegatus*). II. Growth and host specificity of larval stages in relation to the food chain. (With 2 Figures in the Text), 321

STACEY, G. J. *See* RYLEY, J. F.

STEPHEN, L. E. A morphological and biometrical study of the blood forms of *Trypanosoma suis* Ochmann, 1905. (With 2 Figures in the Text), 217

STURROCK, R. F. Observations on the use of *Trichostrongylus colubriformis* (Nematoda) infections of guinea-pigs for laboratory experiments. (With 3 Figures in the Text), 189

SWEATMAN, G. K. and WILLIAMS, R. J. Comparative studies on the biology and morphology of *Echinococcus granulosus* from domestic livestock, moose and reindeer. (With 4 Plates and 82 Figures in the Text), 339

SWEATMAN, G. K. *See* WILLIAMS, R. J.

TAYLOR, A. E. R. Maintenance of larval tapeworms (*Taenia crassiceps*) in a chemically defined medium, 5P

THOMASSON, P. A. *See* BURT, D. R. R.

THURSTON, J. P. Schistosomes from *Hippopotamus amphibius* L. I. The morphology of *Schistosoma hippopotami* sp.nov. (With 6 Figures in the Text), 49

URQUHART, G. M., MULLIGAN, W. and NEILSON, J. T. M. Immunological studies with *Nippostrongylus brasiliensis* in rats: the mechanism of the 'self-cure' reaction, 7P

UTTANGI, J. C. and DESAI, R. N. *Metaclevelandella termitis*, a new genus and species of Heterotrichous ciliate (family Clevelandellidae) found in the Indian termite *Capritermes incola* Wasm. (With 3 Figures in the Text), 39

VICKERMAN, K. *See* COX, F. E. G.

WALKER, P. J. Reproduction of trypanosomes in laboratory rodents, 12P

WARREN, E. W. and BALL, S. J. The effect of sulphaquinoxaline and amprolium on the life cycle of *Eimeria adenoeides* Moore and Brown, 1951, in turkey poults, 653

WATSON, DOREEN P. The effect of cysteine and B group vitamins on the skin of the white laboratory mouse infested with the mite *Myocoptes musculinus* (Koch), 265

WEINSTEIN, P. P. Some aspects of the growth and differentiation of nematodes, 1P

WELCH, H. E. *Amphimermis bogongae* sp.nov. and *Hexamermis cavicola* sp.nov. from the Australian bogong moth, *Agrotis infusa* (Boisd.), with a review of the genus *Amphimermis* Kaburaki & Imamura, 1932 (Nematoda: Mermithidae). (With 18 Figures in the Text), 55

WICKSTEAD, J. H. A new record of *Ellobiopsis chattoni* (Flagellata incertae sedis) and its incidence in a population of *Undinula vulgaris* var. *major* (Crustacea Copepoda). (With 1 Figure in the Text), 293

WILLIAMS, H. H. Observations on *Echeneibothrium* (Cestoda: Tetraphyllidea) from various species of *Raja*, 9P

WILLIAMS, I. C. The infestation of the redfish *Sebastes marinus* (L.) and *S. mentella* Travin (Scleroparei: Scorpaenidae) by the copepods *Peniculus clavatus* (Müller), *Sphyrion Lumpi* (Krøyer) and *Chondracanthopsis nodosus* (Müller) in the eastern North Atlantic. (With 3 Figures in the Text), 501

WILLIAMS, R. J. *See* SWEATMAN, G. K.

WILLIAMS, R. J. and SWEATMAN, G. K. On the transmission, biology and morphology of *Echinococcus granulosus equinus*, a new subspecies of hydatid tapeworm in horses in Great Britain. (With 3 Plates and 13 Figures in the Text), 391

WILLIAMS, T. D. The ecology of plant parasitic nematodes and the diseases they cause, 4P

WOTTON, R. M. and BECKER, D. A. The ingestion of particulate lipid containing a fluorochome dye, Acridine Orange, by *Trypanosoma lewisi*. (With 1 Plate), 163

WOTTON, R. M. and SOGANDARES-BERNAL, F. A report on the occurrence of microvillus-like structures in the caeca of certain trematodes (Paramphistomatidae). (With 1 Plate), 157

YUEN, P. H. A new species of *Oswaldocruzia* Travassos (Nematoda-Trichostrongylidae) from a Malayan frog. (With 8 Figures in the Text), 85

YUEN, P. H. Two new species of the genus *Amplicaecum* Baylis from Malayan amphibians. (With 16 Figures in the Text), 89

Index of Subjects

Acanthocephala, structure and metabolic components of the body wall of, 3P
acridine orange, ingestion of, by *Trypanosoma lewisi*, 163
Adlerocystis, gen.nov., new species of, symbiotic on the sperm of *Ornithodoros tholozani* and *O. parkeri*, 183
Adlerocystis parkeri, gen.nov., sp.nov., a phycomycete symbiotic on the sperms of *Ornithodoros parkeri*, 183
Amblyomma calabyi, sp.nov., description of the adults and nymphs of, 177
Amphimermis bogongae, sp.nov., description of, with a review of the genus, 55
Amplicaecum communis, sp.nov. and *A. sandoshami*, sp.nov., descriptions of, 89
A. robertsi, morphology and larval stages of, 7
, life history, hosts, growth and host specificity of the larval stages of, in relation to the food-chain, 321
ancylostomiasis of dogs, immunological studies of, 8P
Apolocystis, studies on six species of, including the four new species *A. lavernensis*, *A. perfida*, *A. rotaria* and *A. spinosa*, 491
Artyfechinostomum mehrai, Mehlis's gland of, 1

Babesia, species of from *Clethrionomys glareolus* in England, 297
Babesia microtia, from *Microtus agrestis* in England, 297
bile-duct, hyperplasia of, in fascioliasis and its relation to the nutrition of *Fasciola hepatica*, 123
blood parasites of *Microtus agrestis* in England, 297

Capsala martinieri, oncomiracidium of, 449
Caraphractus cinctus, diapause in, 225
Cheyletiella parasitivorax, parasitic on the rabbit, cat and dog in Britain, 651
Chondracanthopsis nodosus, copepod parasitic on redfish in the eastern North Atlantic, 501
Coccidia, two new species of, from the Venezuelan lizard, 95
Copepoda, parasitic on redfish in the eastern North Atlantic, 501
Crescentovitus biloculus, gen.nov., sp.nov., cestode parasitic on siluroid fish in India, 413

Dictyocaulus filaria, resistance of sheep to, 7P
Diplozoon paradoxum, attachment of, to the gills of *Rutilus rutilus*, micro-habitat and adhesive attitude, 455
, structure and mechanism of the adhesive apparatus, 463
Ditrypanocystis cirratuli, gen.nov., sp.nov., parasitic in *Cirriformia tentaculata*, 12P

Echeneibothrium spp., parasitic on *Raja* spp., observations on, 9P
Echinochasmus corvus (syn. *E. caninum*, *E. reniovarus*), description and systematics of, 169
Echinococcus granulosus, in domestic livestock in New Zealand and in moose and reindeer and other hosts in North America, biology and morphology of, 339
, *granulosus equinus*, subsp.nov., in horses in Great Britain, biology, morphology and transmission of, 391
Echinorhynchus clavula, preliminary observations on the occurrence of, in the fish of Llyn Tegid, 2P
Eimeria, species of parasitic in poultry in Hungary, 11P
, species of parasitic in the fowl, effects of dietary vitamin K on, 11P
, species of, parasitic in the fowl, recent work on the immunity to, 10P
Eimeria adenoeides, effect of sulphaquinoxaline and amprolium on the life cycle of, in turkey poults, 653
E. flaviviridis americana, subsp.nov., from the Venezuelan lizard, description of, 95
E. numidae, sp.nov., parasitic in the guinea fowl in Hungary, 11P
Eimeriidae, revision of the classification of, 95
Ellobiopsis chattoni (Flagellata), new record and incidence of, in a population of *Undinula vulgaris* var. *major* (Crustacea, Copepoda), 293

Entobdella diadema, production of spermatophores by, 14P
E. soleae, egg, oncomiracidium and larval development of, 435
, feeding and nature of the food of, 14P
, of the common sole, life cycle of, 253

Fasciola hepatica, migration of the juvenile forms of, through the wall of the intestines of the mouse, 109
, food and feeding of the juvenile forms of, 109
, nutrition of, in relation to hyperplasia of the bile duct of the host, 123
, observations on the feeding of, in the liver of the mouse, 135
fascioliasis, forecasts of the incidence of, for Wales, 1958–62, 4P
Feulgen staining of nuclei, cyclical alterations of, during the development of ascaroid nematodes, 273

Glossina tabaniformis, structure and possible function of the signum of, 145
Grahamella microti, parasitic in *Microtus agrestis* in England, 297
, species of parasitic in *Microtus agrestis* and *Clethrionomys glareolus* in England, 297

Haemonchus contortus, development, migration of the free-living stages of, and longevity of the infective larvae, 469
helminths, parasitic, trends in the incidence of (title only), 4P
Hepatozoon, species of, parasitic in *Clethrionomys glareolus* in England, 297
Hexamermis cavicola sp.nov., description of, 55
Hippopotamus amphibius, schistosomes of, 49
Hoarella garnhami, gen.nov., sp.nov., description of, 99
Hydatigera taeniaeformis, esterases of, and effect eserine on the uptake of glucose by, 5P
Hymenolepis calumnacantha, sp.nov., from Wilson's snipe in Colorado, description of, 409
Hymenolepis spp., esterases of, and effect of eserine on the uptake of glucose by, 5P

insects, defence reactions of, to metazoan parasites (Trematoda, Cestoda, Nematoda, Mermithoidea, Gordiacea, Acanthocephala, Diptera and Hymenoptera), 527

malarial parasites, recent developments in the problem of drug resistance of, 10P
, observations on pigment formation by, 9P
Mehlis's gland, of *Artyfechinostomum mehrai*, 1
Metechinorhynchus truttae, development and life history of, 3P
Metaclevelandella termitis, gen.nov., sp.nov., ciliate parasitic in *Capritermes incola* in India, 39
micro-villus-like structures, occurrence of, in the caeca of Paramphistomatidae, 157
Microtus agrestis in England, blood parasites of, 297
mouse, damage to the liver of, by *Fasciola hepatica*, 135
, a migration of the juvenile forms of *Fasciola hepatica* through the intestinal walls of, 109
, white, effect of feeding cysteine and B-group vitamins on infections with *Myocoptes musculinus*, 265
Myocoptes musculinus parasitic on the white mouse, effect of feeding cysteine and B-group vitamins on, 265
Myxosoma brachyspora sp.nov., *M. heterospora*, sp.nov. and *M. homeospora* sp.nov., parasitic in East African freshwater fish, 285

nematodes, some aspects of the growth and differentiation of, 1P
, effect of certain cytotoxic agents on the larvae of, 6P
, parasitic in plants, ecology of, and diseases they cause, 4P
nematodes, ascaroid, cyclical alterations in the Feulgen staining of the nuclei of, during development, 273
Nippostrongylus brasiliensis, studies of the immunology and 'self-cure' reaction of (title only), 7P
, effects of the age of the infestation on the immunity of the host to, 7P

Notocotylus attenuatus, parasitic in the Indian domestic fowl, with remarks on the genus, 45

Ostertagia ostertagi, host resistance and course of infection with, 63
Oswaldocruzia rohdei, sp.nov., description of, 85

Paramphistomatidae, occurrence of micro-villus-like structures in the caeca of, 157
Paricterotaenia paradoxa, occurrence of and morphology of the scolex of, 9P
Peniculus clavatus, copepod parasitic on redfish in the eastern North Atlantic, 501
Phycomycetes, new species of, symbiotic on the sperm of species of *Ornithodoros*, 183
Plistophora sp., parasitic in *Bufo bufo*, 11P
Polymorphus minutus, morphological and histochemical observations on, 663
Proteocephalus niloticus, morphology of, and life history in *Varanus niloticus*, 201
Psychoda (*Philosepedon*) *humeralis*, description of the larva of, 155

Schistosoma hippopotami, sp.nov., morphology of, 49
self-cure of infections of the guinea-pig with *Trichostrongylus colubriformis*, 189
Sphyrion lumpi, copepod parasitic on redfish in the eastern North Atlantic, 501
Strongyloides papillosus, effect of temperature on the development of the adults of, 483

Taenia crassiceps, maintenance of the larvae of, in a chemically defined medium, 5P
Toxoplasma gondii, fine structure of, during reproduction and growth, 643
, cytochemical and electron microscopic studies of, 13P
Triaenophorus nodulosus, seasonal occurrence and maturation of, in *Esox lucius*, 419
Trichostrongylus colubriformis, in the guinea-pig, course of the infection and apparent self-cure, 189
trichomoniasis, experimental chemotherapy of, 303
Trypanosoma, spp., from *Clethrionomys glareolus* in England, 297
T. lewisi, ingestion of acridine orange by, 163
T. microti, parasitic in *Microtus agrestis* in England, 297
T. suis, morphology and biometric study of, 217
trypanosomes, reproduction of, in laboratory rodents, 12P